

# ASSOCIATE IN ENGINEERING (A10500) CURRICULUM GUIDELINES

Name: \_\_\_\_\_

Student ID: \_\_\_\_\_ Phone: \_\_\_\_\_

Sem. Entered: \_\_\_\_\_

## WAYNE COMMUNITY COLLEGE

Graduate of High School within last 5 years with a GPA of 2.6 or higher and FRC code of 1-4 = exempt from testing.  Yes  No

Test Scores	Reading	Writing	Math:
<input type="radio"/> NCDAP/Accuplacer	_____ (DRE Composite)		DMA: 010 _____ DMA 020 _____ DMA 030 _____ DMA 040 _____ DMA 050 _____ DMA 060 _____
<input type="radio"/> Compass	_____	_____	Pre-Algebra _____ Algebra _____ College Algebra _____ Trig. _____
<input type="radio"/> Asset	_____	_____	Numerical _____ Algebra _____
<input type="radio"/> CPT/AccuPI	_____	Sent. Sk. _____	Arithmetic _____ Algebra _____
<input type="radio"/> SAT	_____	_____	_____
<input type="radio"/> ACT	_____	_____	_____

Computer Test _____ <input type="radio"/> CIS 070
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Pre-Curriculum Courses (Enter Test Out [TO] or semester required.)

DRE 096 _____	DRE 098 _____	DMA 010 _____	DMA 030 _____	DMA 050 _____	DMA 070 _____
DRE 097 _____	DRE 099 _____	DMA 020 _____	DMA 040 _____	DMA 060 _____	DMA 080 _____

\* ACA 085 \_\_\_\_\_

\*Students testing into both DMA and DRE, regardless of the level, are required to take ACA 085. ACA 085 must be completed before ENG 111.

## REQUIREMENTS FOR GRADUATION

### I. GENERAL EDUCATION CORE (42 SHC)

#### A. UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (UGETC)

##### 1. English Composition (6 SHC)

The following **TWO ENGLISH COMPOSITION COURSES** are **REQUIRED**.

CHECK COURSES	SEM. REG.	COURSE	SEM. HRS. CREDIT	GRADE
<input type="radio"/>		ENG 111 Writing and Inquiry	3	
<input type="radio"/>		ENG 112 Writing/Research in the Disciplines	3	

##### 2. Humanities/Fine Arts (6 SHC)

Select **ONE COURSE** from each category

CHECK SELECTED COURSES	SEM. REG.	COURSE	SEM. HRS. CREDIT	GRADE
<input type="radio"/>		<b>Humanities:</b> Choose One:		
<input type="radio"/>		ENG 231 American Literature I	3	
<input type="radio"/>		ENG 232 American Literature II	3	
<input type="radio"/>		PHI 215 Philosophical Issues	3	
<input type="radio"/>		PHI 240 Intro. to Ethics	3	
<input type="radio"/>		REL 110 World Religions	3*	
		(*REL 110 will transfer for equivalency credit to the engineering programs at all five UNC institutions that offer undergraduate engineering programs. It may not transfer with equivalency to other programs.)		
<input type="radio"/>		<b>Fine Arts and Communication:</b> Choose One:		
<input type="radio"/>		ART 111 Art Appreciation	3	
<input type="radio"/>		ART 114 Art History Survey I	3	
<input type="radio"/>		ART 115 Art History Survey II	3	
<input type="radio"/>		COM 231 Public Speaking	3	
<input type="radio"/>		MUS 110 Music Appreciation	3	
<input type="radio"/>		MUS 112 Intro. to Jazz	3	

##### 3. Social/Behavioral Sciences (6 SHC)

**ONE COURSE** required. Select **SECOND COURSE**.

CHECK SELECTED COURSES	SEM. REG.	COURSE	SEM. HRS. CREDIT	GRADE
<input type="radio"/>		<b>Required:</b>		
<input type="radio"/>		ECO 251 Principles of Microeconomics	3	
<input type="radio"/>		<b>Choose One:</b>		
<input type="radio"/>		HIS 111 World Civilizations I	3	
<input type="radio"/>		HIS 112 World Civilizations II	3	
<input type="radio"/>		HIS 131 American History I	3	
<input type="radio"/>		HIS 132 American History II	3	
<input type="radio"/>		POL 120 American Government	3	
<input type="radio"/>		PSY 150 General Psychology	3	
<input type="radio"/>		SOC 210 Intro. to Sociology	3	

##### 4. Math (12 SHC)

\*Calculus I is the lowest level math course that will be accepted by the engineering programs for transfer as a math credit. Students who are not calculus-ready will need to take additional math courses.

CHECK SELECTED COURSE	SEM. REG.	COURSE	SEM. HRS. CREDIT	GRADE
<input type="radio"/>		MAT 271 Calculus I	4	
<input type="radio"/>		MAT 272 Calculus II	4*	
<input type="radio"/>		MAT 273 Calculus III	4*	

##### 5. Natural Sciences (12 SHC)

CHECK SELECTED COURSE	SEM. REG.	COURSE	SEM. HRS. CREDIT	GRADE
<input type="radio"/>		CHM 151 General Chemistry I	4	
<input type="radio"/>		PHY 251 General Physics I	4	
<input type="radio"/>		PHY 252 General Physics I	4	

**Total General Education Hours Required: 42 SHC**

**II. OTHER REQUIRED HOURS (18 SHC)**

SEM. REG.	COURSE	SEM. HRS. CREDIT	GRADE
<b>Academic Transition (1 SHC)</b>			
	ACA 122 College Transfer Success	1	
<b>Pre-Major Elective (2 SHC)</b>			
	EGR 150 Introduction to Engineering	2	

**Other General Education and Pre-major Elective Hours (15 SHC)**

Select 15 SHC of courses from the following courses classified as pre-major, elective, or general education courses within the Comprehensive Articulation Agreement.

Students should choose courses appropriate to the specific university and engineering major requirements.

SEM. REG.	COURSE	SEM. HRS.	GRADE
	BIO 111 General Biology I	4	
	CHM 152 General Chemistry II	4	
	COM 110 Introduction to Communication	3	
	CSC 134 C++ Programming	?	
	CSC 151 Java Programming	?	
	ECO 252 Principles of Macroeconomics	3	
	EGR 220 Engineering Statics	3	
	EGR 225 Engineering Dynamics	3	
	HUM 110 Technology and Society	3	
	MAT 285 Differential Equations	3	
	PED 110 Fitness and Wellness for Life	2	

\_\_\_\_\_ Total Semester Hours Credit (SHC) in Program: 60-61\*\*

\*\*One semester hour of credit may be included in a 61 SHC Associate in Engineering program of study. The transfer of this hour is not guaranteed.

Student must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

The degree plan includes required general education and prerequisite courses that are acceptable to all state funded Bachelor of Engineering programs. Students who follow the degree progression plan will meet the entrance requirements at all of the North Carolina public Bachelor of Science Engineering programs. Associate in Engineering graduates may then apply to any of these programs without taking additional and sometimes duplicate courses.

Admission to Engineering programs is highly competitive and admission is not guaranteed.

To be eligible for the transfer of credits under the AE to the Bachelor of Science in Engineering Articulation Agreement, community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5 on a 4.0 scale.

I have reviewed this information with my advisor and understand the course requirements that must be met to complete the program.

Student Signature \_\_\_\_\_ Advisor Signature \_\_\_\_\_